Internal Revenue Service memorandum

CC: INTL-0167-91 CPTello-Br6 APR 4 1991

date:

to: District Counsel, Boston, MA ATTN: Madlyn B. Coyne

from: Associate Chief Counsel (International) CC

Technical Assistance - Whether the copying of a software subject: program onto multiple blank disks constitutes "manufacturing" under section 954 (d) (1).

> By memorandum dated January 31, 1991, you have requested technical advice concerning several issues with respect to what constitutes "manufacturing" section 954 (d) (1) and § 1.954-3 (a) (4) (ii) and (iii).

> 1. Section 1.954-3 (a) (4) (ii). a. Does substantial transformation occur when a software program is copied onto a blank disk?

No. Substantial transformation requires that the final product must be sufficiently distinguishable from some of its components to constitute a substantial transformation of the purchased parts. See Dave Fischbein Manufacturing Co. V. Commissioner, 59 T.C. 338, 360 (1972), acq., 1973-2 C.B. 2. The imprinting of a software program onto multiple blank disks, together with packing of the resultant disk with purchased explanatory materials, is not the transformation into a new and different article. The physical disk has been combined with the intangible component of the software to produce an article that provides instructions to a machine and forms an integral part of the machine. The physical form of the disk and the purchased explanatory materials remain unchanged and are recognizable in the final product. Also, no change to the software occurs. Accordingly, no substantial transformation has occurred.

Additionally, you have asked if a readily perceptible change must occur in order for the substantial transformation test to be satisfied. Our position is that a perceptible change is required under the current regulations and case law.

Finally, it is our position that the substantial transformation test is a determination in a physical sense as opposed to an economic sense. After the imprintation process, the blank disk becomes a more valuable commodity because it is imprinted with the software. This fact, however, is not relevant to whether there has been a physical substantial transformation.

- b. Easy reversibility. The ease of reversibility is only one factor to be considered in determining whether substantial transformation has occurred. However, it is difficult to conceive of a process occurring that produces a new article with a new name and new use and that is not distinguishable from its parts if that article can easily be returned to its original state.
- 2. Section 1.954-3 (a) (4) (iii). a. Fischbein analysis. The process of imprinting multiple blank disks with a software program also does not meet the purchased components test of § 1.954-3 (a) (4) (iii) because this process is not comparable in scope to the 58-step, 6-hour process described in Fischbein. The analysis performed by the court in Fischbein should be followed in determining whether a taxpayer satisfies the requirements of this test.
- b. Other processes. You have asked if the processes involved in reproducing a book, record, compact disc, video, or audio cassette meet the purchased components test. We have not considered this question. If, however, these processes require only the minimal, brief amount of activity required to imprint a blank disk with a software program, the purchased components test would not be met.
- 3. Application of 20-percent safe harbor test. Questions 3 and 4 in your memorandum will be addressed together.



(b)(5)(DP)

(b)(5)(DP)

Finally, analysis of the language of the regulations The description of the 20-percent provides the same result. test is prefaced by the statement "[w]ithout limiting this substantive test (referring to the purchased components test), which is dependent on the facts and circumstances of each case." Immediately following the description of the test is the sentence "[i]n no event, however, will packaging, repackaging, labeling, or minor assembly operations constitute the manufacture... of property.... Read together, this language clearly provides that the minimal activity of packaging, etc., is to be disregarded. If no other activity occurs, the 20-percent test cannot operate because there are no costs to be considered.

Based upon the above discussion, our opinion is that before the 20-percent test can be applied, a determination must be made whether any activity beyond that of packaging, etc. occurs. If not, the purchased components test cannot be met, even if the costs of the minor activity were counted and constituted at least 20 percent of the total costs. Fischbein type analysis is only performed with respect to activities that constitute more than the minor activities of packaging, etc.

(b)(5)(DP)

not attempting to consider the myriad of cases that fall between the ceiling of "manufacturing" and the floor of "not manufacturing" because these cases must be determined on the basis of the individual facts and circumstances. activities described in the MANANDE submission may be more extensive than those described in (b)(5)(DP) (b)(5)(DP) . As for their argument that the imprinting of the blank disk with the copyrighted software rearranges the pattern of electrons, this rearrangement reflects the combination of the blank disk component with another component, the copyrighted software. The disk component, however, remains in recognizable form. Although the software component cannot be seen, it can be read by a machine. machine, it has not undergone a change. It is the same set of instructions as is on the master disk. Furthermore, as to their argument that the location of the research and development does not determine where manufacturing occurs, the Supreme Court held that design and development can constitute manufacturing and that the activity of manufacturing is not

limited solely to fabrication. See <u>United States v. Western</u> <u>Electric Company</u>, 894 F.2d 1387 (D.C. Cir. 1990).

We hope that this memorandum is of assistance to you. Please do not hesitate to call Carol Tello, FTS 377-9493, if you have further questions.

STEVEN R. LATNOFF